CLAIMS

Claims 52, 53, 58, 60, 69, 73, 98 and 100 are currently being amended, new claims 107-111 are currently being added, and claims 55-57, 59, 61-67, 70-72, 74-94, 96, 97, 99, 102, and 104 are currently being canceled, as shown below. All claims are reproduced below, including those that remain unchanged.

1. - 51. (Canceled).

52. (Currently Amended): A therapeutic ~~member~~ implant configured to be implanted in a similar manner as loose radioactive seeds are implanted, for use in brachytherapy, comprising:

a single radioactive seed that includes radioactive material contained within a metallic housing; and

a polymeric material molded to completely encapsulate the metallic housing of the single radioactive seed;

wherein an outer surface of the encapsulating polymeric material ~~includes~~ defines one or more ~~protrusions~~ ribs having a substantially squared profile formed by a stepped portion extending between a pair of sidewalls to reduce a tendency of the ~~member~~ implant to migrate and rotate within a patient's body after implantation; and

wherein a thickness of the encapsulating polymeric material varies such that the thickness is greater where there is ~~a~~ one of said ~~protrusion~~ one or more ribs than where there is not a ~~protrusion~~ rib.

53. (Currently Amended): The therapeutic ~~member~~ implant of claim 52, wherein the one or more ~~protrusions~~ ribs are made from the polymeric material that encapsulates the metallic housing of the single radioactive seed.

54. (Previously Presented): The therapeutic ~~member~~ implant of claim 53, wherein the polymeric material is bio-absorbable.

55.-57 (Canceled)

58. (Currently Amended): The therapeutic ~~member~~ implant of claim ~~57~~ 52, wherein the one or more ~~protrusions~~ ribs are defined by a shape of a mold that is used to encapsulate the seed.

59. (Canceled)

60. (Currently Amended): The therapeutic ~~member~~ implant of claim ~~59~~ 52, wherein the one or more ribs form one or more rings or a helix about the radial circumference of the metallic housing of the radioactive seed.

61.- 67. (Canceled)

68. (Previously Presented): The therapeutic ~~member~~ implant of claim 52, wherein the thickness of the encapsulating polymeric material that encapsulates the metallic housing of the single radioactive seed is at least 0.002 inches.

69. (Currently Amended): The therapeutic ~~member~~ implant of claim 52, wherein at least one of the one or more ~~protrusions~~ ribs extends at least 0.002 inches beyond portions of the encapsulating polymeric material where there is not a ~~protrusion~~ rib.

70.-72. (Canceled)

73. (Currently Amended): The therapeutic ~~member~~ implant of claim 52, wherein the metallic housing of the single radioactive seed includes first and second longitudinal ends, and wherein the one or more ~~protrusions~~ ribs are located between the longitudinal ends of the of the metallic housing of the single radioactive seed.

74.-94. (Canceled)

95. (Previously Presented): The therapeutic ~~member~~ implant of claim 52, wherein the metallic housing of the single radioactive seed has a substantially smooth outer surface, without any protrusions, that is completely encapsulated by the polymeric material.

96. (Canceled)

97. (Canceled)

98. (Currently Amended) A therapeutic ~~member~~ implant configured to be implanted in a similar manner as loose radioactive seeds are implanted, for use in brachytherapy, comprising:

a single radioactive seed that includes radioactive material contained within a metallic housing having a substantially smooth outer surface; and

a polymeric material molded to completely encapsulate the metallic housing of the single radioactive seed;

wherein an outer surface of the encapsulating polymeric material includes a plurality of ~~protrusions~~ ribs, each of said ribs having a substantially squared profile formed by a stepped portion extending between a pair of sidewalls to reduce a tendency of the ~~member~~ implant to migrate and rotate within a patient's body after implantation; and

wherein the ~~protrusions~~ ribs are defined by variations in a thickness of the encapsulating polymeric material, not by an outer surface of the underlying metallic housing.

99. (Canceled)

100. (Currently Amended): The therapeutic ~~member~~ implant of claim 99, wherein a thickness of the encapsulating polymeric material varies such that the thickness is greater where there is a said ~~protrusion~~ rib than where there is not a ~~protrusion~~ rib.

101. (Previously Presented): The therapeutic ~~member~~ implant of claim 52, wherein the polymeric material is bio-adhesive.

102. (Canceled)

103. (Previously Presented): The therapeutic ~~member~~ implant of claim 52, wherein the polymeric material is bio-adherent.

104. (Canceled)

105. (Previously Presented): The therapeutic ~~member~~ implant of claim 98, wherein the polymeric material is bio-adhesive.

106. (Previously Presented): The therapeutic ~~member~~ implant of claim 98, wherein the polymeric material is bio-adherent.

107. (New): A therapeutic implant configured to be implanted in a patient comprising:

a single radioactive seed that includes radioactive material contained within a metallic housing, the metallic housing of the single radioactive seed being elongated along a longitudinal axis with a metallic cylindrical body and first and second metallic rounded ends;

a polymeric housing formed about and completely encapsulating said metallic housing, said polymeric housing including a polymeric cylindrical body which is formed about said metallic cylindrical body of said metallic housing, and said polymeric housing having first and second polymeric rounded end ribs which are formed about and cap said first and second metallic rounded ends;

said first polymeric rounded end rib including a first inwardly facing sidewall which is substantially perpendicular to the longitudinal axis;

said second polymeric rounded end rib including a second inwardly facing sidewall which is substantially perpendicular to the longitudinal axis, with the first inwardly facing sidewall facing said second inwardly facing sidewall;

said polymeric housing including a first polymeric rib and a second polymeric rib, said first and second polymeric ribs completely encircling said radioactive seed and with said first and second ribs located between the first inwardly facing sidewall and the second inwardly facing sidewall, with said first polymeric rib spaced from said first polymeric rounded end rib, and said second polymeric rib spaced from said first polymeric rib, and said second polymeric rounded end rib spaced from said second polymeric rib;

said first polymeric rib including third and fourth sidewalls that are substantially perpendicular to said longitudinal axis;

said second polymeric rib including fifth and sixth sidewalls that are substantially perpendicular to said longitudinal axis;

wherein said first and second polymeric rounded end ribs and said first and second polymeric ribs are defined by the thickness of the encapsulating polymeric housing and not by the metallic housing of said single radioactive seed;

wherein said therapeutic implant is adapted to be urged out of a needle to be implanted in a patient and wherein said therapeutic implant is adapted to receive tissue between the first inwardly facing sidewall and said third sidewall, between said fourth sidewall and said fifth sidewall, and between said sixth sidewall and said second inwardly facing sidewall, when the therapeutic implant is implanted in a patient in order to reduce the tendency of the therapeutic implant to migrate within the patient's body.

108. (New): A therapeutic implant configured to be implanted in a patient comprising:

a single radioactive seed that includes radioactive material contained within a metallic housing, the metallic housing of the single radioactive seed being elongated along a longitudinal axis with a metallic cylindrical body and first and second metallic rounded ends;

a polymeric housing formed about and completely encapsulating said metallic housing, said polymeric housing including a polymeric cylindrical body which is formed about said metallic cylindrical body of said metallic housing, and said polymeric housing having first and second polymeric rounded end ribs which are formed about and cap said first and second metallic rounded ends;

said first polymeric rounded end rib including a first inwardly facing sidewall which is substantially perpendicular to the longitudinal axis;

said second polymeric rounded end rib including second inwardly facing sidewall which is substantially perpendicular to the longitudinal axis with the first inwardly facing sidewall facing said second inwardly facing sidewall;

said polymeric housing including a first polymeric rib, said first polymeric rib completely encircling said radioactive seed and said first polymeric rib located between the first inwardly facing sidewall and the second inwardly facing sidewall, with said first polymeric rounded end rib spaced from said first polymeric rib and said first polymeric rib spaced from said second polymeric rounded end rib;

said first polymeric rib including third and fourth sidewalls that are substantially perpendicular to said longitudinal axis;

wherein said first and second polymeric rounded end ribs and said first polymeric rib are defined by the thickness of the encapsulating polymeric housing and not by the metallic housing of said single radioactive seed; and

wherein said therapeutic implant is adapted to be urged out of a needle to be implanted in a patient and wherein said therapeutic implant is adapted to receive tissue between the first inwardly facing sidewall and said third sidewall and between said fourth sidewall and said second inwardly facing sidewall when the therapeutic implant is implanted in a patient in order to reduce the tendency of the therapeutic implant to migrate within the patient's body.

109. (New): A therapeutic implant configured to be implanted in a similar manner as loose radioactive seeds are implanted, for use in brachytherapy, comprising:

a single radioactive seed that includes radioactive material contained within a metallic housing, the single radioactive seed having a length that extends along a longitudinal axis; and

a polymeric material encapsulating the metallic housing of the single radioactive seed;

a pair of ribs defined by the outer surface of the encapsulating polymeric material, the ribs capping opposite ends of the single radioactive seed;

wherein each of the ribs from the pair of ribs includes a sidewall substantially perpendicular to the longitudinal axis; and

at least one additional rib defined by the outer surface of the encapsulating polymeric material and encircling the single radioactive seed, the at least one additional rib arranged between the pair of ribs capping opposite ends of the single radioactive seed;

wherein the at least one additional rib includes a surface connected between a pair of additional sidewalls, the additional sidewalls being substantially perpendicular to the longitudinal axis and substantially perpendicular to the surface of the at least one additional rib; and

wherein the therapeutic implant is adapted to receive tissue between the additional sidewalls of the at least one additional rib and sidewalls of the pair of ribs capping opposite ends of the single radioactive seed when the therapeutic implant is implanted in a patient's body to reduce a tendency of the implant to migrate within the patient's body after implantation.

110. (New): A therapeutic implant configured to be implanted in a similar manner as loose radioactive seeds are implanted, for use in brachytherapy, comprising:

a radioactive source; and

a polymeric material encapsulating the radioactive source;

a pair of ribs defined by the outer surface of the encapsulating polymeric material, the ribs capping opposite ends of the radioactive source so that the ribs guide the therapeutic implant when positioned within and urged through a needle;

wherein each of the ribs from the pair of ribs includes a sidewall substantially perpendicular to the radioactive source; and

at least one additional rib defined by the outer surface of the encapsulating polymeric material and encircling the radioactive source, the at least one additional rib arranged between the pair of ribs capping opposite ends of the radioactive source;

wherein the at least one additional rib includes a surface connected between a pair of additional sidewalls, the additional sidewalls being substantially perpendicular to the radioactive source and substantially perpendicular to the surface of the at least one additional rib;

wherein the therapeutic implant is adapted to receive tissue between the additional sidewalls of the at least one additional rib and the sidewalls of the pair of ribs capping opposite ends of the radioactive source when the therapeutic implant is implanted in a patient's body to reduce a tendency of the therapeutic implant to migrate within the patient's body after implantation; and

wherein the pair of ribs and the at least one additional rib are defined by variations in a thickness of the encapsulating polymeric material, not by an outer surface of the radioactive source.

111. (New): A therapeutic implant configured to be implanted in a similar manner as loose radioactive seeds are implanted, for use in brachytherapy, comprising:

a single radioactive seed that includes radioactive material contained within a metallic housing, the single radioactive seed having a length that extends along a longitudinal axis; and

a polymeric material encapsulating the metallic housing of the single radioactive seed;

a pair of ribs defined by the outer surface of the encapsulating polymeric material, the ribs capping opposite ends of the single radioactive seed;

wherein each of the ribs from the pair of ribs includes a sidewall substantially perpendicular to the longitudinal axis; and

at least one additional rib defined by the outer surface of the encapsulating polymeric material and encircling the single radioactive seed, the at least one additional rib arranged between the pair of ribs capping opposite ends of the single radioactive seed;

wherein the at least one additional rib includes a pair of additional sidewalls substantially perpendicular to the longitudinal axis; and

wherein the therapeutic implant is adapted to receive tissue between the additional sidewalls of the at least one additional rib and the sidewalls of the pair of ribs capping opposite ends of the single radioactive seed when the therapeutic implant is implanted in a patient's body to reduce a tendency of the implant to migrate within the patient's body after implantation.